

NEDEVETSKY S. V. and HAUCHMAN J. A. Influence of the colloidal state of cholesterol on its aqueous-colloid dispersion Biochimia, Moscow 1948, 13/3 (234-235)

It was previously shown that the oxidation of cholesterol in aqueous colloid dispersion by O_2 at 37-39° C. in the presence of a catalyst (palladium plus platinum) proceeds differently from the oxidation of cholesterol in true (molecular) solution by means of chemical oxidizing agents. In the latter case the double bond and/or the hydroxyl group is first oxidized, while in the catalytic oxidation only the carbon atoms (especially C_7) of the cholesterol nucleus are oxidized. Oxidation of cholesterol in true solution by H_2O_2 yields cholestantriol as the sole product. In aqueous colloid dispersion cholesterol is oxidized by H_2O_2 to give several products resembling those obtained by catalytic oxidation of colloidal cholesterol with O_2 . It is believed that the difference in mode of oxidation is due solely to the different physico-chemical state of the cholesterol.

Cytronberg - Mexico City

SO: Physiology Biochemistry and Pharmacology. Section II, Vol. 2, No. 9.

Chair of Biol. Chem, Yaroslavl' Med. Inst.

LEOLER, P.P.; NEZVETSKIY, S.V.

Hypercholesterolemia in thyroidectomized dogs. Vop.med.khin.
3:143-147 '51. (MIRA 11:4)

1. Kafedra biokhimii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta.
(CHOLESTEROL METABOLISM) (THYROID GLAND)

MEDEVETSKIY, S.V.; RATHITSKAYA, S.S.

Physico-chemical condition of cholesterol in blood serum. *Biokhimiya* '51,
16, 471-477. (MLRA 4:10)
(BA - 411 My '53:676)

NEDZVETSKIY, S.V.; ORECHKA, F.P.; SHPAT'S, T.A.

Causes of hypercholesterolemia. Vop.med.khim. 4:133-138 '52.
(MIRA 11:4)

1. Kafedra biokhimii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta.
(CHOLESTEROL METABOLISM) (ACETONEMIA)

NEDEZVETSKIY, S.V.

Chemical Ab. 1.
Vol. 48 No. 3
Feb. 10, 1954
Biological Chemistry

①

Sterols of the animal organism: 7-hydroxy- α -cholesterol
 S. V. Nedzvetshii, A. N. Panyukov, and T. A. Shpat.
 (Leningrad Med. Inst., Chair Biol. Chem.). *Biokhimiya*
 18, 315-18 (1953).—Dogs received 0.5 g. of cholesterol and .
 g. of fat per kg. body wt. for 10-12 days and were then sacrifi-
 ced. The blood was diid. with 4 vols. of acetone and the
 mixed organs were treated similarly with acetone. Re-
 peated extrns. with acetone were made and the acetone frac-
 tions were combined, evapd. residue extrd. with ether, fil-
 tered and 20-30 ml. EtOH added to the filtrate. The ether
 was evapd. and the alc. residue washed with alc. into a
 conical tube and let stand overnight. A ppt. formed con-
 sisting of fat, cholesterol, and its esters. The supernatant
 contg. the same as well as other sterols, was sepd. from the
 ppt., the alc. evapd., and a chromatographic adsorption on
 Al oxide was made of a vols. of the residue. 7-Hydroxy- α -
 cholesterol is formed in the animal organism. It was iso-
 lated from brain, lungs, and the blood and none from the
 liver and muscle.
 B. S. Levine

HEIDZVETSKIY, S.V.; MIKHAYLOVA, T.A.

Formation of oxysterols in fasting rabbits. Vop.med.khim. 5
no.4:276-278 JI-Az '59. (MIRA 12:12)

1. Kafedra biologicheskoy khimii Leningradskogo sanitarno-gigiyeni-
cheskogo meditsinskogo instituta.
(CHOLESTEROL metab.)
(STARVATION exper.)

NEDZVETSKIY, S.V.: LILUP, T.B.

Chick embryo sterols: 7- α -hydroxycholesterol and effect of the incubation time on its amount in the egg. Biokhimiia 24 no.2:349-352 Mr-Apr '59.
(MIRA 12:7)

1. Chair of Biological Chemistry, the Sanitary-Hygienic Medical Institute, Leningrad.

(CHOLESTEROL,

7-(α)-hydroxycholesterol in chick embryo (Rus))

(OVUM,
same)

NEDZVETSKIY, S.V.; KUZ'MINA, S.N.

Structure of lipoproteins of the gray matter of animal brain.
Biokhimiia 25 no.2:251-254 Mr--Ap '60. (MIRA 14:5)

1. Kafedra biologicheskoy khimii Sanitarno-gigiyenicheskogo meditsinskogo instituta, Leningrad.
(LIPOPROTEINS) (BRAIN)

NEDZVETSKIY, S.V.

Nutritional hypercholesteremia in dogs. Vop. pit. 22 no.2:
55-57 Mr-Apr '63. (MIRA 17:2)

1. Iz kafedry biologicheskoy khimii (sav. - prof. S.V. Nedzvetskiy) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

NEDEVTSKIY, V.V.

Maintaining the original draft of Diesel boats of the "Bol'shaia Volga" type with damaged bottom seams. Rech.transp. 13 no.1:39-40 Ja-F '53.
(MLRA 6:11)

(Ships--Maintenance and repair)

VEDZVETSKIY, M. E.,

M. E. Vedzvetkiy, in his paper "Use of Centimeter waves for Controlling Technological Processes", describes the automatic control of a number of technological processes of certain physical parameters (as for instance: humidity, temperature, concentration of solutions, etc.) of non-reacting materials. He described a setup for controlling the humidity of wooden rods moving in a stream.

Presented at the Eleventh Scientific and Technical Session of the Leningrad Section VVGRE (Scientific and Technical Society for Radio and Electricity) ineni A. S. Popov, dedicated to the celebration of 100th, Leningrad, 14-20 Apr 56.

(*Radio Enginering*, No. 1, 1956)

NEZVETSKIY, Yu.E., Inzh.; DOBROVOLETSKAYA, V.I.

Increasing zone stability in vertical smelting without a refractory.
Trudy NII TVGH no. 1/2:188-190 1964

S/137/62/000/003 075/194
A006/A101

AUTHOR: Nedzvetskiy, Yu.E.

TITLE: Methods of increasing the rod section in zonal melting without crucibles

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 45. abstr. int. 3113
(V sb. "Prom. primeneniye tokov vysokoy chastoty v elektrottermii",
Moscow-Leningrad, Mashgiz, 1961, 118 - 123)

TEXT: The author analyzes methods of increasing the rod section in zonal melting without crucibles, with vertical and horizontal arrangement of the rods. It is noted that during local cooling of the solid portions of a vertically arranged rod near the melt, the rod diameter can be increased. However, due to conicity of the crystallization fronts, the inner portion of the molten zone and the rod should be additionally heated. This can be brought about with the aid of special heating devices, passing electric current through the rod. The aforementioned methods can be practically applied during melting in any gas atmosphere, necessary for cooling. Moreover, a force effect of the electromagnetic field on the melt can be achieved; this makes it possible to increase the zone height.

Card 1/2

Methods of increasing the rod section in

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AC06/A161

and, consequently, the rod diameter. The molten zone is then produced by the smelting inductor, underneath which a so-called supporting inductor is located. The feed frequency of the supporting inductor is selected to assure a stabilizing force effect on the melt at a minimum power of heat liberated in the zone and in the solid portion of the rod. Calculations and experiments show that for the majority of metals and semiconductors the optimum frequencies are in the subsonic and ultrasonic ranges at a rod diameter of several centimeters. In a horizontal arrangement of the rod, a dc current is passed through the rod to ensure the equilibrium of the molten material, and the zone is placed into a longitudinal magnetic field, whose interaction with the current produces the necessary stabilizing supporting force. The section can be increased and round rods in horizontal zonal melting can also be obtained with the aid of an electromagnetic field, produced with supporting inductors which are arranged at the zone boundaries.

B. Turovskiy

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/004/050/201
ACC6/AIC1

AUTHORS: Batnikov, D.G.; Dourovoi'skaya, V.I.; Nedzvetskiy, Yu.E.

TITLE: Heat problems in zonal melting without crucibles

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 46 - 47, abstract 46315 (V sb. "Prom. primeneniye tokov vysokoy snastoty v elektrotermii", Moscow-Leningrad, Mashgiz, 1961, 124 - 129)

TEXT: The authors calculated the power necessary to produce the molten zone, assuming that this power is dissipated from the surface of the melt and the sections of the solid rod located near the zone. The total power is equal to

$$P = \pi D (\sigma \pi T_0^4 + \sqrt{2} \epsilon \lambda D T_0^2 / 5) \quad (1)$$

where D is the rod diameter, T is the absolute surface temperature, ϵ is the emissivity of the material, λ is the coefficient of heat conductivity. The superposition of displacement rate of the zone, v, entails some modification of the basic equation. For zonal melting of Si with D = 3 cm, a calculation is presented which shows that in this case additional power ΔP is consumed. At v = 1.3

Card 1/2

Heat problems in zonal melting without crucibles

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A000/A10.

and 10 mm/min, ΔP is respectively: 3.1, 26.2 and 212 watt. The total power calculated by formula (1) for this case is 1,900 watt. Temperature distribution in the rod is calculated and experimental results on the effect of various factors upon the crystallization front in zonal melting are given. It is shown that at a zone height which is approximately equal to the diameter of the Si rod, melting proceeds at a plane crystallization front. The height of the zone can be reduced, with simultaneous maintaining of the plane front, by intensified cooling of the rod. It was revealed by experiments that in the case of a narrow induction coil a lesser zone height than in the case of a high induction coil is required for through-fusion of the ingot or the production of a plane crystallization front. It is expedient to use narrow induction coils and to operate with least permissible gaps.

J. Golovin

[Abstracter's note: Complete translation.]

Card 2/2

14315-65 IWT(m)/ENP(t)/ETP(b) JD
ACCESSION NUMBER 047594

8/3117/60/000/01-01188/0190

14
BTI

AUTHOR: Nedvetskii, Yu. E. (Engineer); Dobrovolskaya, V. I.

TITLE: Increasing the stability of the zone during vertical crucibleless melting

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut tolov vy sokoy chastoty.
Trudy, no. 1-2, 1960, 188-190

TOPIC TAGS: crucibleless melting, induction heating, all zone melting, vertical melting, zone melting, zone stability, semiconductor alloy

ABSTRACT: The stability of the melted zone during vertical crucibleless melting determines the critical height limit of the melt zone. To increase the stability, the height should be lowered, but only to a certain value which still ensures thorough heating of the melt. If the diameter of the ingot is increased, then the zone height must also be increased. It is seldom possible to increase the ingot diameter above 1.5 cm. In order to increase the height of the zone it is necessary to create conditions in which the internal hydrostatic pressure at the surface counteracts the external pressure. The projection of the distribution of this hydrostatic pressure along the vertical axis for a cylindrical zone takes the shape of

ACQUISITION NO. APO64756

On the basis of publications by W. Heywang, W. G. Okress, D. M. Wroughton, G. Comenetz, P. H. Brace and I. C. K. Kelly, the authors conclude that induction systems may be used to create the required pressure. Tests have shown that this increases the stability of the zone if the projection of the square of the magnetic field intensity on the zone surface approaches the required triangle. The electromagnetic pressure was created by means of a coil placed below the melt zone created by a heating element. The generator frequency was chosen to produce the maximum mechanical action on the melt zone. This optimal frequency ensured the highest stability at the lowest generator power. Most of the tests were carried out during the melting of silicon in a vacuum. The melt zone was created by the induction method using a generator with a frequency of 5 megacycles per second and a power of 8 kW. The melt was intensively mixed by the vertical component of the induction force. The described method for improving the stability of the crucibleless melt zone may be used in industry and opens new fields for experimentation. In particular, it may be assumed that this method may be used for obtaining monocrystalline ingots of semiconductor alloys with a uniform distribution of components. Orig. art. has: 2 figures.

ACQUISITION FILE # 100739		ASSOCIATION (Nauka i issledovatel'skiy institut tokov vysokoy chastoty, Leningrad)		SIGNATURE (Institute of High-Frequency Currents)	
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NEEDHAM, D.L.

Mechanism of uterine muscle contraction. Studii cerc biochimie
6 no.4:459-466 '63.

1. Departamentul de Biochimie, Universitatea din Cambridge,
Anglia.

NEPME, T.

Experiences in using chemical weed control. p. 18

SOTSILIKTLIK POLLOMAJANDUS. POLLOMAJANDUS INISTERTUM.
Tallin, Hungary. No. 1, 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 11
November 1959.

Uncl.

WERT, H.

PERIODICAL

Periodical: СВЕТАЛИНА & КОЛЕВИЧЕВИЧ Vol. 10, no. 1, Jan. 1959.

WERT, H. Opportunities for cultivation of Polygonum samalinense
H. Schum. as a soil plant. p. 12

Monthly List of East European Accessions (EPI) 10, Vol. 1, no. 5,
May 1959, unclass.

NEPAGIN, Aleksandr Fedorovich; LYSYY, A., red.; GOLICHENKOVA, A.,
Ukrain. red.

[Strength of the collective; a trade-union groups effort
to increase labor productivity] Sila kollektiva; profgruppa
v bor'be za povyshenie proizvoditel'nosti truda. Moskva,
Profisdat, 1955. 29 p. (MIRA 16:8)
(Ural Mountain region--Electric equipment industry--Labor productivity)
(Trade unions)

WUJICHENG, Yu. N., Izv.; IZVYDENKO, P. A., Izv.; SAKI, MIYAKI, S.,
Izv.

Wall panels from porous foam slag concrete. Str. 1. kv. 1.
10 no. 13 3 1964 (1964)

MEDEDIEV, P.

Lenin's idea is being fulfilled. Nauka i tekhnika 15 no.5:
9 1963

1. Zamestnik zavozhdasht otдела za elektricheska energija
pri Sekretariata na SIV.

ACC NR: AT6005058 (N) SOURCE CODE: UR/0000/65/000/000/0100/0117

AUTHOR: Mikhelev, I. P.; Nefedkina, T. V.; Trigubov, A. V.

ORG: none

TITLE: Studying intrusives by the reflected-wave method in the Rudnyy Altay region

SOURCE: AN SSSR. Sibirskoye otdeleniye. Institut geologii i geofiziki. Metodika seysmorazvedki (Methods of seismic prospecting). Moscow, Izd-vo Nauka, 1965, 100-117

TOPIC TAGS: seismology, seismic prospecting, reflected wave, seismic wave, seismic profile, reflected wave, seismic array, STRATIGRAPHY, REFLECTED SHOCK WAVE

ABSTRACT: This article deals with the results of seismic investigations of the Tushkanikh polymetallic ore deposits in the Zmeinogorsk region of the Rudnyy Altay carried out in 1961—1962 by the Institute of Geology and Geophysics of the Siberian Branch of the Academy of Sciences USSR. The possibilities of using the method of reflected waves (MOV) in studying the deep-seated (to a depth of 500 m) structure of metamorphic and intrusive rock complexes are discussed. The method of reflected waves was supplemented in the field by the regulated-direction method (RNP). The observation system was mainly a three-point set-up with shots at 400-m intervals. SS-24P seismic stations and ARNP apparatus
Card 1/2

ACC NR: AT6005058

were used. Working filtrations were 45—90 and 30—65. SPED-56 seismographs (9 on a 40-m base) were employed. Charges were exploded in holes 12—24 m deep. When the bedrock was close to the surface, the holes were drilled to the top of the bedrock (8—10 m). The sizes of charges varied, up to 15—20 kg for recording waves over long time periods. Charges of about 100 kg were detonated in water bodies. A profile was constructed on the basis of RNP data for depths down to 10 km. Although the present procedures for observing and interpreting profiles are affected by lateral waves and noise, and the plotting of levels on the profile is not sufficiently accurate, the basic outlines of the depth profile are quite clear. Geological interpretation based on kinematic and dynamic (damping) wave parameters, as well as the use of data obtained by other geophysical methods, is attempted. Orig. art. has: 8 figures, 2 tables, and 4 formulas. [EO]

SUB CODE: 08/ SUBM DATE: 30Sep65/ ORIG REF: 009/ OTH REF: -002

Card 2/2

L 44394-66 EWT(1) GD/GW

ACC NR: AT6005063 (N) SOURCE CODE: UR/0000/65/000/000/0164/0189

AUTHOR: Gol'din, S. V.; Nefedkina, T. V.

37

ORG: none

TITLE: Grouping and the controlled direction method as a part of an optimal receiver with suppression of correlated noise

B+1

SOURCE: AN SSSR. Sibirekoye otdeleniye. Institut geologii i geofiziki. Metodika seysmorazvedki (Methods of seismic prospecting). Moscow, Izd-vo Nauka, 1965, 164-189

TOPIC TAGS: seismic signal spectrum, signal to noise ratio, seismic signal, reception, seismic wave summing, seismic noise correlation, seismograph array, seismograph

ABSTRACT: F. M. Gol'tsman and his colleagues have shown that the controlled-direction method (mode) (RNP) and, the grouping of waves with the apparent velocity $V = -$ becomes a part of an optimal receiver when the signal parameters are accurately known and noise is not correlated along the profile. The present article shows that this result is also approximately valid in the case of correlated noise when a wave is received in such a way that the direction of its synphasal axis coincides with the direction of maximum correlation of noise (although wave

Card 1/2

L 44394-66

ACC NR: AT6005063

detection is poorest in this direction). It is also shown that the assumption of an accurately known waveform (with constancy of this waveform along the profile) is not necessary. In a number of cases, this result was quite accurate. Noise of the type considered in this article can occur when many waves with different apparent velocities, but averaging about the same as the apparent velocity of the useful waves, are superposed. If the condition of matching of the maximum correlation of the noise and the signal is not satisfied, the optimal operations on the input functions should have an entirely different construction. The results obtained in this work are generally valid when the grouping method and the controlled-direction method are combined under conditions that are not optimal for them, since summing the vibrations in the direction of the synphasal axis, as calculated by the formulas for the noise correlation function along this axis, has a higher signal-to-noise advantage than any other summing in this direction. In this sense, the combination of grouping and the controlled-direction method considered here can be called optimal for any direction of maximum noise correlation. Some examples of calculations of parameters of optimal groups are given in the original article, and comparisons are made of these groups with homogeneous groups. Some new results are given for practical correlation functions. Group parameters are calculated without resorting to frequency representations. A relationship is established between grouping with suppression of regular noise and irregular noise. Orig. art has: 62 formulas, 5 figures, and 1 table. (E)

SUB CODE: 08/ SUBM DATE: 30Sep65/ ORIG REF: 005
Card 2/2 efb.

15(0), 15(2)

AUTHORS: Nikulin, V. M., Nefedkina, Ye. B. SOV/131-59-1-2/12

TITLE: **For Further Technical Progress**
(Za dal'neyshiy tekhnicheskiy progress)

PERIODICAL: Ogneupory, 1959, Nr 1, pp 11 - 13 (USSR)

ABSTRACT: The total production of the works for refractory materials of the Mosoblsovnarkhoz in 1957 was 1.7 times greater than in 1950. The principal sources of the increase in production were: better utilization of equipment capacities, the elimination of bottlenecks, introduction of up-to-date experience, perfection of manufacturing processes, introduction of new modern refractory types of products. In the coming 7 years, it is intended to mechanize individual working operations and works departments; special attention will be paid to the questions of mechanizing the work of loading and unloading. The works in the Moscow area are getting substantial help from the scientific research institutes and the Khimiko-tekhnologicheskii institut imeni Mendeleyeva (Chemical-Technological Institute imeni Mendeleyev). The Podol'skiy, Vnukovskiy, Snigirevskiy and

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For Further Technical Progress

SCV/131-59-1-2/10

Dneprodovskiy works have extended the assortment of their products and - within the 7-year scheme - they will be modernized and will partly be automatically controlled with a view of increasing production figures considerably.

Card 2/2

TOMASH, K.K.; DAVYDOV, I.P.; NEFEDKINA, Ye.B.

Exchange of advanced experience in the production of casting
equipment. Ogneupory 29 no.12:575-577 '64.

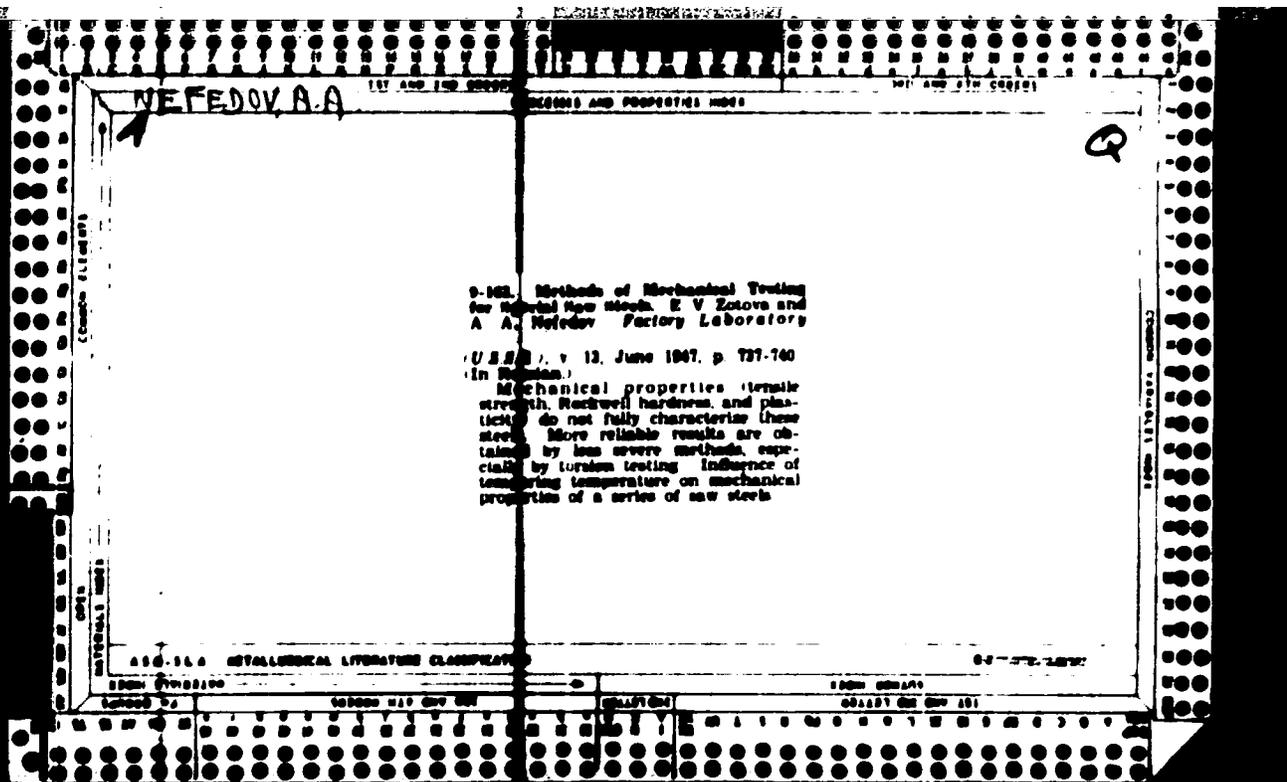
(MIRA 18-1)

1. Zaporozhskiy ogneupornyy zavod (for Tomash, Davydov).
2. Gosmetallurgkomitet (for Nefedkina).

ZOTOVA, YE. V., Engineer; NEFEDOV, A. A., Engineer

"The Selection of Steel and the Heat Treatment Condition for Blades Cutting Wire up to 65 Millimeters in Diameter", Stanki I Instrument, 17, Nos 2-3, 1946

BR-52059019



137-58-1-606

Translation from Referativnyy zhurnal Metallurgiya, 1958, No. 1, p. 9 (USSR)

AUTHOR Nefedov, A. A.

TITLE: Experience in the Operation of a Section Shop (Opyt raboty sortoprokatnogo ts'kha)

PERIODICAL Tr. Nauchno-tekhn. o-va chernoy Metallurgii, 1956, Vol. 10, pp. 420-423

ABSTRACT. The operation of the section shop at the Yenakiyevsk iron and steel mill, having two merchant mills, is described. One is a 360 mill in two lines, the other a 280 mill in three lines. The most important measures taken in the shop to improve the productivity of the mills are: 1) improvement of the soaking of billets by intensifying bottom heating, 2) reduction in the cross section of the blanks from 170x170-190x190 to 150x150-170x170 mm, 3) improved grooving, which made it possible to reduce the number of passes on the reducing stands, and introduction of universal grooving for the purpose of rolling round sections, 4) installation of power-driven rack-type cooling beds with flying shears and a cold cutting press. As a result of these measures, the productivity of the mills in 1954 rose more than 40

Card 1/2

137-58-1-606

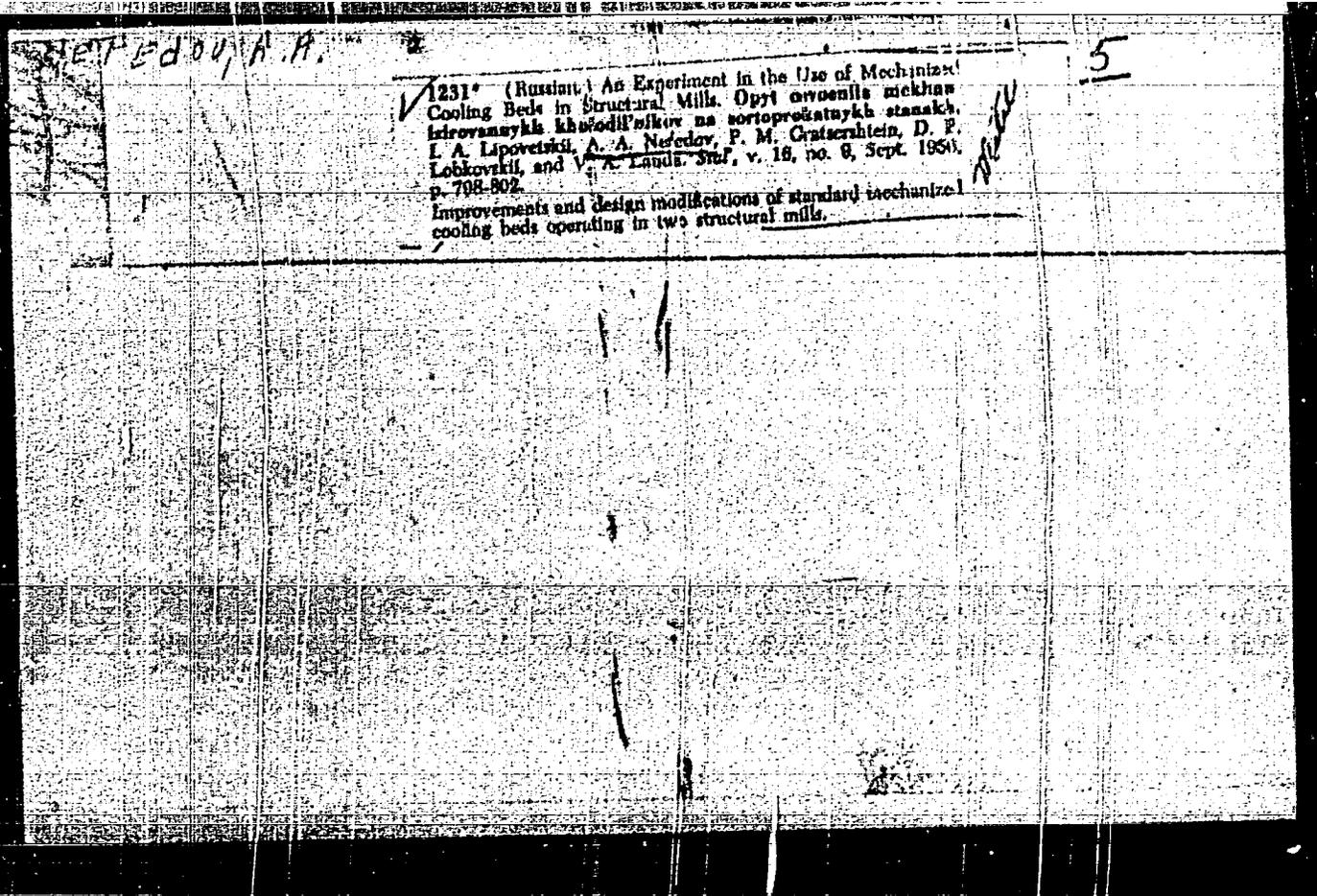
Experience in the Operation of a Section Shop

percent over the 1950 level See RzhMet, 1957, Nr 12, 23805

S G

1. Rolling mills—Operation

Card 2 / 2



MEFEDOV, A.A., kandidat tekhnicheskikh nauk; SHCHERBINA, G.Z., inzhener.

Increasing the productivity of thin sheet mills. Metallurg 2 no.6:
23-25 Je '57. (MIRA 10:6)

1. Ural'skiy institut chernykh metallov (for Mefedov). 2. Tsentral'
naya savodskaya laboratoriya Enakiyevskogo metallurgicheskogo savoda
(for Shcherbina).

(Rolling (Metalwork))

137-1958-1-585

Translation from Referativnyy zhurnal Metallurgiya 1958, No. 1, p. 92 (USSR)

AUTHORS Chekmarev, A. P. ~~Nefedov, A. A.~~

TITLE Forward Slip in Rolling With Rolls of Unequal Diameter: Operatsionnye pri prokatke na valkakh neravnogo diametra

PERIODICAL Tr In-ta chernov metallurgii ANUKSSR 1957, Vol. II, pp. 105-107

ABSTRACT An investigation of forward slip (FS) in the rolling of a Pb strip of 10, 15, and 20 mm gage at 35 rpm on plain steel rolls (R) differing in diameter by 5, 8, 12, 25, and 35 mm shows that FS is always greater on the side facing the smaller R than on that facing the larger roll. The regularity governing the change in FS relative to thickness reduction is quite complex. When the reduction is small or moderate, there is a simultaneous increase in FS on the sides facing both R's. When the reduction is greater, forward slip on the side of the R of greater diameter is reduced, whereas on the side of the smaller R it increases sharply up to a given value, after which first a diminution and then a renewed increase is observed. At the same time, FS begins to increase on the side facing the R of larger diameter. An increase in the difference between the R's leads to a significant increase in the difference in FS. V. D.

Card 1/1

1. Lead--Processing 2. Rolling mills--Operation 3. Lead--Deformation--Effects of rolling

Nefedov, H.A.

130-3-10/21

AUTHORS: Nefedov, A. A., Candidate of Technical Sciences and
Ilyukovich, B. N., Senior Calibrator of Chusovoy
Metallurgical Works.

TITLE: Rational roll-pass design for rolling hexagonal steel.
(Ratsional'naya kalibrovka dlya pro atki shestigrannoy
stali).

PERIODICAL: Metallurg, 1958, No.3, pp.21-24 (USSR).

ABSTRACT: The authors show (Fig.1) four arrangements for rolling hexagonal steel for nuts and bolts and discuss their features. They favour an arrangement requiring only two special passes which secures high mill productivity with constancy of dimensions and sharpness of corners of the product and point out that finishing pass dimensions must give product dimensions within GOST 2879-51. The authors go on to describe a new design of finishing pass in which free movement of the side faces is permitted and enumerate its advantages. They give values for the desirable concavity of the pre-finishing pass for 10 - 42 mm hexagonal steel, based on experience at the Chusovskiy Metallurgical Works, and show that for the new system greater concavity is required than recommended by the All-Union conference on roll-pass design. After Card 1/2 mentioning the roughing systems used at other works, the

Rational roll-pressing for rolling steel
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steel. The...
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There...

Ural'skiy institut metallov (Ural Institute of Metals)
and Chusovskiy metallurgicheskiy zavod (Chusovoy
Metallurgical Works).

Library of ...

Card 2/2

SOV/133-58-6-18/33

AUTHOR: Soroko, L.N., Mefedov, A.A., Yershov, V.N., Masyukov, S.N. (Deceased), Frolov, N.P. and Braunshteyn, R.A.

TITLE: Rolling of Lightened Nr 19 Beam from Low Alloy Steel O9G2D (Prokatka oblegchenoy balki no 19 iz nizkolegirovannoy stali O9G2D)

PERIODICAL: Stal', 1958, Nr 6, pp 532 - 537 (USSR)

ABSTRACT: An experimental rolling of a lightened Nr 19 beam from low-alloy steel O9G2D (composition %: C \leq 0.12; Mn 1.4-1.7; Si 0.2-0.4; Cu 0.22-0.44; Cr \leq 0.30; Ni 0.01-0.03; S and P \leq 0.04) is described. Lightened Nr 19 beam (Figure 1) (TuTs 08-124-57) weighs 19.5% less per m than normal Nr 19 beam (GOST-5267-50) which is usually rolled from steel St3. For experimental rolling, four heats of steel O9G2D were made. Rolling was done on the mill 500 from shaped semis (Figure 2). The calibration of rolls is shown in Figure 3. The metal was heated from cold charging to an average temperature of 1170 °C. The decrease of temperature in the individual passes - Figure 4. The final temperature of the neck of the beam was 60 °C lower than that of normal beam. Frequency distribution of deviations of dimensions from the nominal ones - Figure 5. The comparison of the loads on the individual stands during rolling of normal and lightened Nr 19

Card1/3

SCV/137-58-1-18/33

Rolling of Lightened Nr 19 Beam from Low Alloy Steel OGG2D

beams together with the maximum permissible loads and rpm of motors - Table 1. The comparison of the mill throughput per hour during rolling normal and lightened Nr 19 beams - Table 2. Mechanical properties of specimens cut from various places of the beam - Tables 3 and 4. It is concluded that: 1) rolling of light Nr 19 beam on the mill 50C is possible with the existing equipment; 2) dimensions of the profile obtained were situated mainly in the range of minus tolerances; 3) the temperature of the neck at the end of rolling was 790 °C, i.e. 60 °C below the temperature obtained during rolling normal beam Nr 19; 4) load on motors of roughing stands was 22-23% higher than during rolling of normal Nr 19 beam. Loads on the finishing stands either do not exceed or only slightly exceed permissible ones; 5) specific power consumption was 37% higher than during rolling normal Nr 19 beam from St 3 steel; 6) the output of the mill during rolling of the light beam decreases by 12%. It is expected that with mastering of the process, this decrease can be reduced to 6; 7) the chemical composition and mechanical properties of OGG2D steel

Card 2/3

SOV/133-58-6-18/33

Rolling of Lightened nr 19 Beam from Low Alloy Steel 09G2D

satisfy the requirements of standard GOSTU-5688-56 for low-alloy steels. The following engineers participated in the work: N.I. Khoroshev, I.K. **Sharapov** and F.A. Firsakov. There are 5 figures and 4 tables.

ASSOCIATIONS: Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Combine) and Ural'skiy institut chernykh metallov (**Urals Institute of Ferrous Metallurgy**)

Card 3/3

1 Beams--Production. 2 Rolling mills--Applications

AUTHORS: Rastorguyev, A.A. Candidate of Technical Sciences, ^{307/133-58-11-1-72}
~~Nefedov, A.A.~~ Borzova P.I., Belyakov, A.I. and
Simakova, M.S., Engineers

TITLE: Low-texture cold-rolled Electrotechnical Steel
(Maloteksturovannaya kholodnokatanaya elektrotekhnicheskaya stal')

PERIODICAL: Stal', 1958, Nr 11, pp 1023 - 1029 (USSR)

ABSTRACT: According to new standards, anisotropy in respect of magnetic induction along and across sheets of low-alloy steel (E1100, E1200, E1300) should not exceed 1 300 Gauss and for higher alloy steel (E3100 and E3200) - 1 600 Gauss. Anisotropy of various types of cold-rolled transformer steel reached 3 000 - 5 000 Gauss. The problem of the formation of texture in this steel was investigated by TsNIICM (Refs 1, 2) and the results then obtained were used as a basis of the present investigation of the production of low-texture steel carried out on the Novosibirsk Works. It was found that low-alloy silicon steel (about 1.5% Si) which passed cold rolling by the usual technology (with large reductions) and the highest recrystallisation annealing (at 1 000 °C) is characterised by a predominant orientation of crystallites with the edge

Card1/3

SCV/133-56-11-12/25

Low-texture Cold-rolled Electrotechnical Steel

of the cube along the direction of rolling. Low-alloy two-phase silicon steel with a comparatively small anisotropy can be obtained: a) by annealing at a comparatively low temperature (850 °C) during which neither a considerable crystal growth nor preferential orientation of crystals takes place; and b) by annealing above the critical temperature which leads to phase recrystallisation with the orientation of grains in various directions; whereupon an increase of the annealing temperature to 1100 - 1150 °C promotes an increase in the size of crystals and a decrease in specific losses. The ability of steel to the formation of texture depends on the content of silicon. At a constant degree of reduction in the last cold rolling stage, steel with a higher silicon content has a more sharply pronounced texture of recrystallisation than steel with a lower silicon content. Higher alloyed single-phase steel with a comparatively low anisotropy can be obtained by applying before the final high-temperature

Card2/3

Low-texture Cold-rolled Electrotechnical Steel SOV/133-58-11-19/25

annealing a small reduction (e.g. by reducing from a thickness of 0.54 mm to 0.50 mm). There are 4 figures, 6 tables and 4 references, 3 of which are Soviet and 1 English.

ASSOCIATIONS: TsNIICM and Novosibirskiy metallurgicheskiy zavod (Novosibirsk Metallurgical Works)

Card 3/3

SOV/133-58-12-14/19

AUTHORS: Belyakov, A.I., Nefedov, A.A. and Simakova, M.S.

TITLE: Cold Rolled Electrotechnical Steel 1mm Thick
(Kholodnokatanaya elektrotekhnicheskaya stal'
tolshchiny 1.0 mm)

PERIODICAL: Stal', 1958, Nr 12, pp 1128-1129 (USSR)

ABSTRACT: The production of cold rolled steel 1mm thick, containing 3% of silicon was tested under laboratory conditions in TsNIICHM and under works conditions in the Novosibirsk Works. The process was based on that of producing E310-E330 steels with some decrease in the degree of reduction during the first and second cold rolling. The main features of the technology are: a) hot rolling of slabs 150 x 620 x 2600 mm into strip 2.5 x 620 mm; b) decarburising annealing of coiled strip in electric furnaces at 830x800°C; c) pickling in an aqueous solution of sulphuric acid; d) cold rolling from 2.5 mm to 1 mm; e) cutting of coils into sheets 1.0x600x1500mm; f) covering with talc; g) final annealing of sheets in vacuo at 850°C. Electromagnetic properties of sheets

Card 1/2

Cold Rolled Electrotechnical Steel 1mm Thick SOV/133-58-12-14/19

annealed at 850 - 1150°C are shown in the Table. Steel annealed at 850°C is practically isotropic with satisfactory electromagnetic properties. On annealing at higher temperatures anisotropy appears.

There are: 1 figure and 2 tables

ASSOCIATION: Novosibirskiy metallurgicheskiy zavod i TsNIChM (Novosibirsk - Metallurgical Works and TsNIChM)

Card 2/2

133-88-3-20/00

AUTHORS: Belyakov, A.I. and Nefedov, A.A.

133-88-3-20/00

TITLE: Decarburisation During the Production of Cold Rolled Transformer Steel (Obezuglerozhivaniye pri proizvodstve kholodnokatanoy transformatornoy stali)

PERIODICAL: Stal', 1958, ¹⁸nr 3, p 248 (USSR)

ABSTRACT: The decarburisation of transformer steel (involving its magnetic properties) at an intermediate manufacturing stage at a strip thickness of 2.5 mm, during annealing in vacuo-furnaces of the Novosibirsk Works with a residual pressure of 15 - 20 mmHg, as well as the usual annealing in electric furnaces operating without a protective atmosphere and with a protecting paraffin oil gas (the composition given) was studied. Chemical composition of heats used for the investigation - Table 1; the influence of atmosphere on decarburisation of transformer strip 2.5 mm thick during annealing - Table 2. Annealing of coiled transformer steel in cap furnaces without a protective atmosphere leads to a considerable decarburisation of steel, and an even higher degree of decarburisation is obtained on annealing in vacuo furnaces without pickling. If the strip is pickled and then annealed in vacuo or in paraffin oil gas, then the decarburisation is insignificant or totally absent. The above indicated the

Card1/2

Decarburisation During the Production of Cold Rolled Transformer Steel 173-58-3-20/29

importance of scale in the process of decarburisation. It is concluded that annealing of coiled transformer steel strip 2.5 mm thick should be carried out in furnaces without a protective atmosphere or in vacuo whereupon the metal should not be pickled before annealing. There are 2 tables.

ASSOCIATION: Novosibirskiy metallurgicheskiy zavod (Novosibirsk Metallurgical Works) and TsNIICHM

AVAILABLE: Library of Congress

Card 2/2

SOROKO, L.N.; ~~HEPUDOV, A.A.~~ VERGHOV, V.N.; MASYUKOV, S.N.[deceased];
PROLOV, N.P.; BARUSHTEYN, R.A.

Rolling light-weight girders No. 19 using low-alloy 0902D steel [with
summary in English]. Stal' 18 no. 6:532-537 Je '58. (MIRA 11:7)

1. Kuznetkiy metallurgicheskiy kombinat i Ural'skiy institut
chernykh metallov.

(Rolling(Metalwork))
(Steel alloys)

SOV/133-59-9-2.../31

AUTHORS: Nefedov, A.A. and Borzova, P.I.

TITLE: Stainless Electrotechnical Steel Kh12Yu

PERIODICAL: Stal', 1959, Nr 9, pp 835-837 (USSR)

ABSTRACT: Properties of stainless steel Kh12Yu which does not corrode in air with tropical humidity and temperature, developed by the Central Scientific-Research Iron and Steel Institute, are described. Chemical composition of steel %: C < 0.05, Mn < 0.3, Si < 0.5, P < 0.03, S < 0.03, Cr 11.0-13.0, Ni < 0.3, Al 1.2-1.5. Steel belongs to the ferritic class. On smelting, attention should be paid to prevent any increase in the carbon content, as the latter forms with chromium structurally free carbides which deteriorates the magnetic and electrical properties of the steel. The steel can be easily hot and cold rolled. Cold rolling to 2.0, 0.5 and 0.1 mm can be done without an intermediate annealing. On testing for brittleness transverse and longitudinally cut specimens 0.5 and 0.1 mm thick withstood more than 50 bendings. Magnetic properties of specimens cut out along and transverse to the direction of rolling after vacuo annealing (10^{-2}) at 800°C and cooled with the furnace to 400°C at a rate of 50°/hr and

Card 1/2

SOV/133-59-9-22/31

Stainless Electrotechnical Steel Kh12Yu

then in a container in air - table; changes in the magnetic induction and magnetic permeability of the steel specimens 0.50 and 0.10 mm thick in weak, medium and strong fields - Fig 1, 2 and 3; the dependence of specific losses on magnetic induction - Fig 4. High corrosion resistance and satisfactory magnetic properties of the steel Kh12Yu make it suitable for the manufacture of equipment operating in tropical climates (for parts which cannot be covered with protective coatings). There are 4 figures and 1 table.

ASSOCIATION: TsNIICM

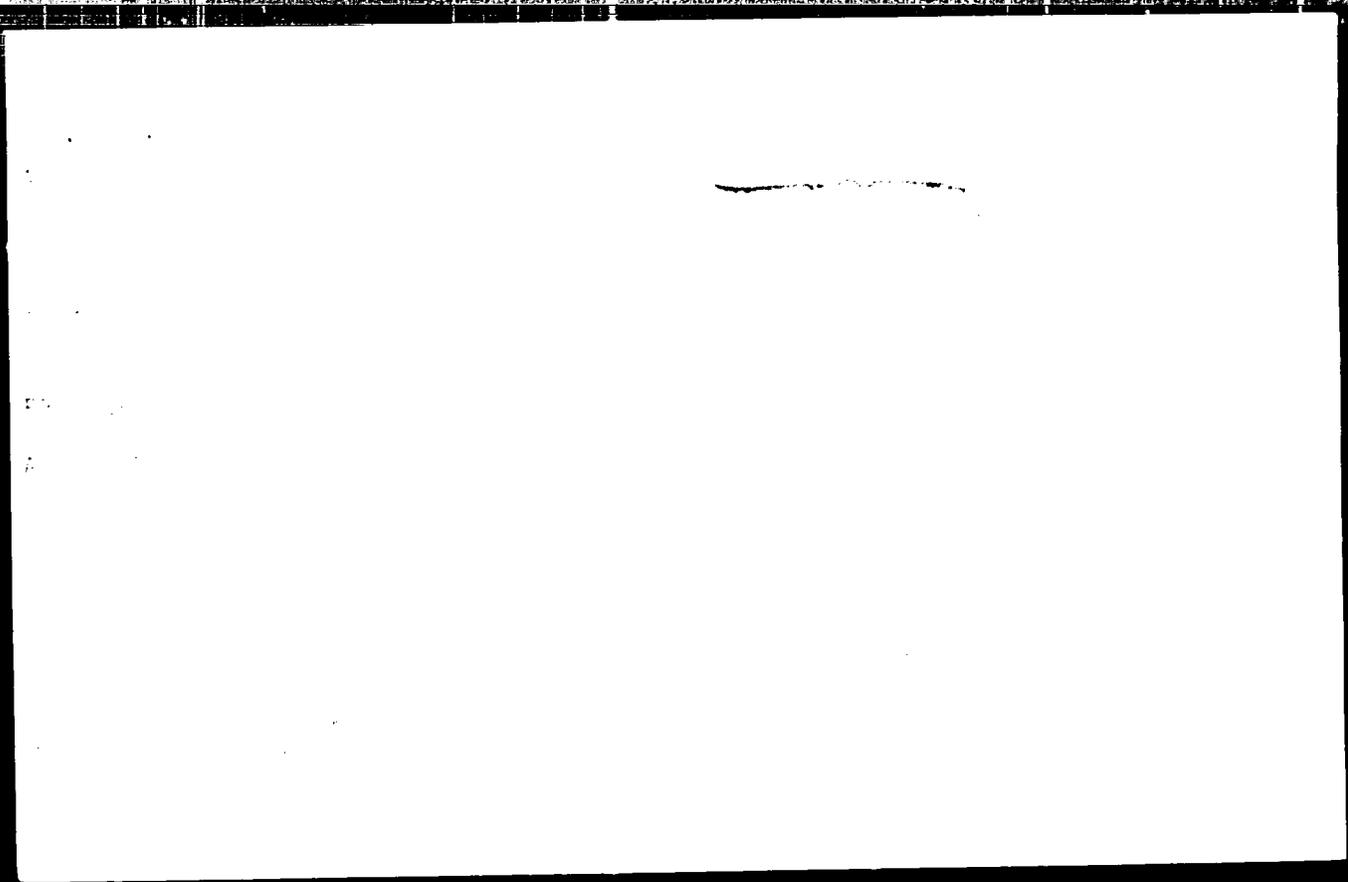
Card 2/2

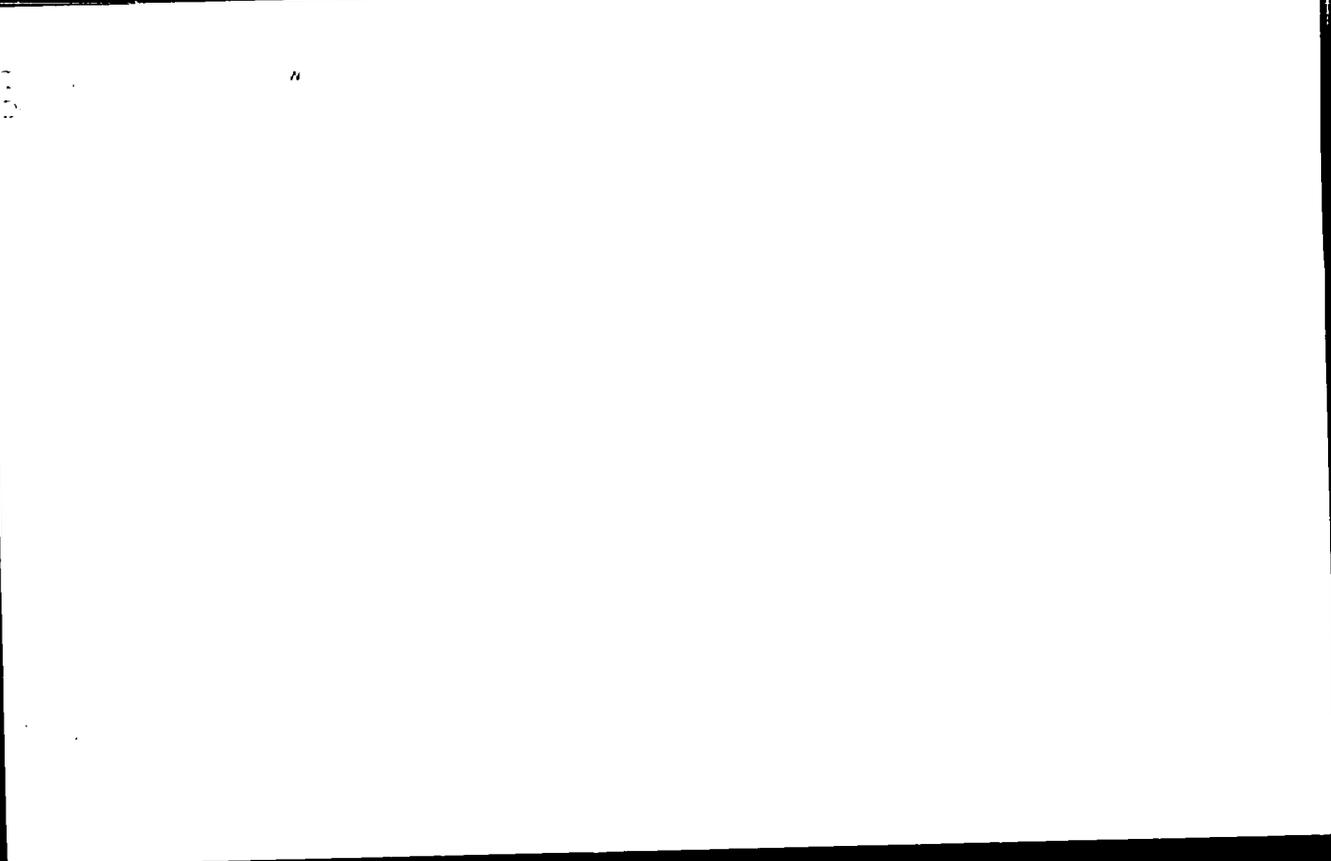
NEFEDOV, A.; SIMAKOVA, M.; BFLIAKOV, A.

*Cold rolled 1.0 mm. electric steel. Tr. from the Russian.

Hutnik. Praha, Czechoslovakia. Vol. 9, no. 3, Mar. 1959.

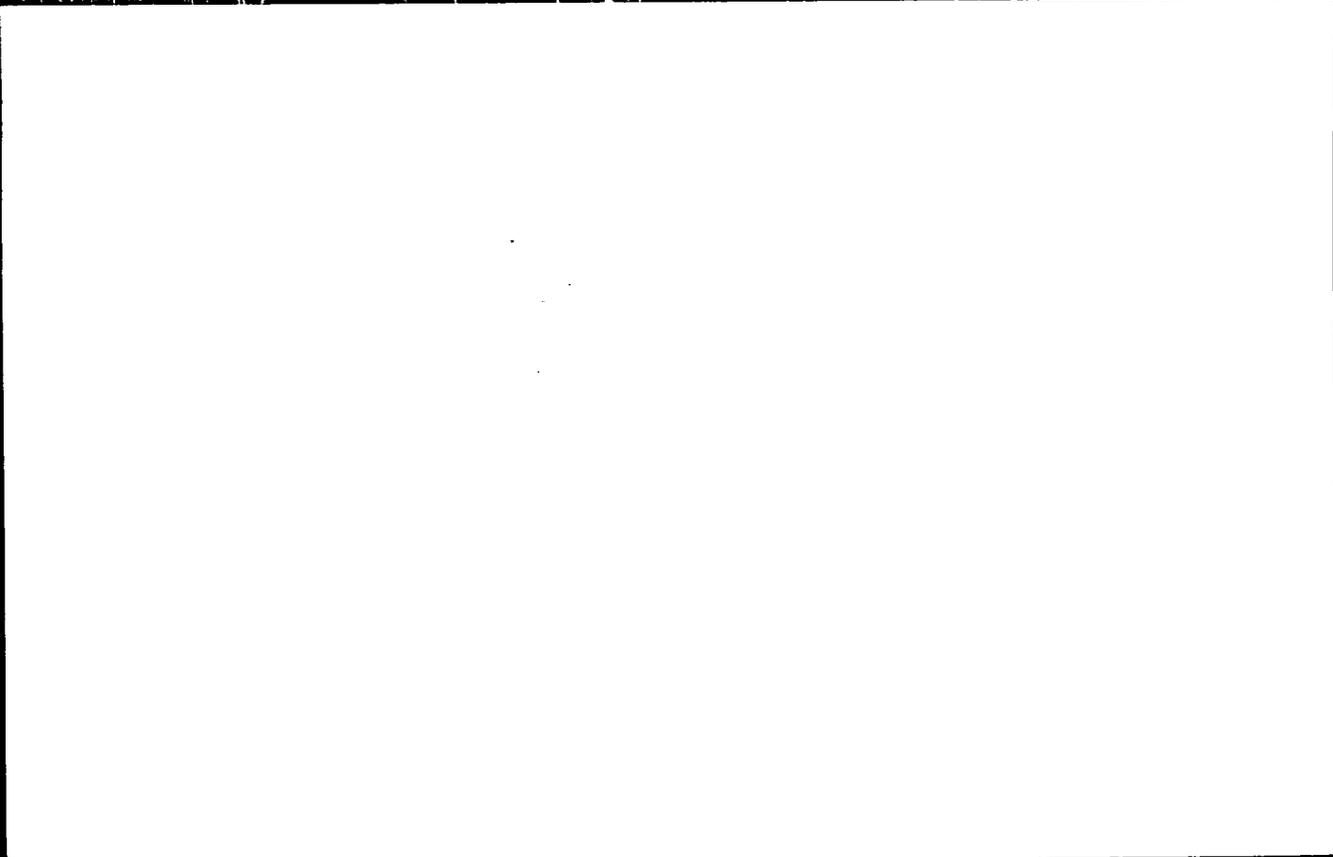
Monthly list of East European Accessions (FEAI), LC, Vol. 8, No. 6, Jun 50, Unclass





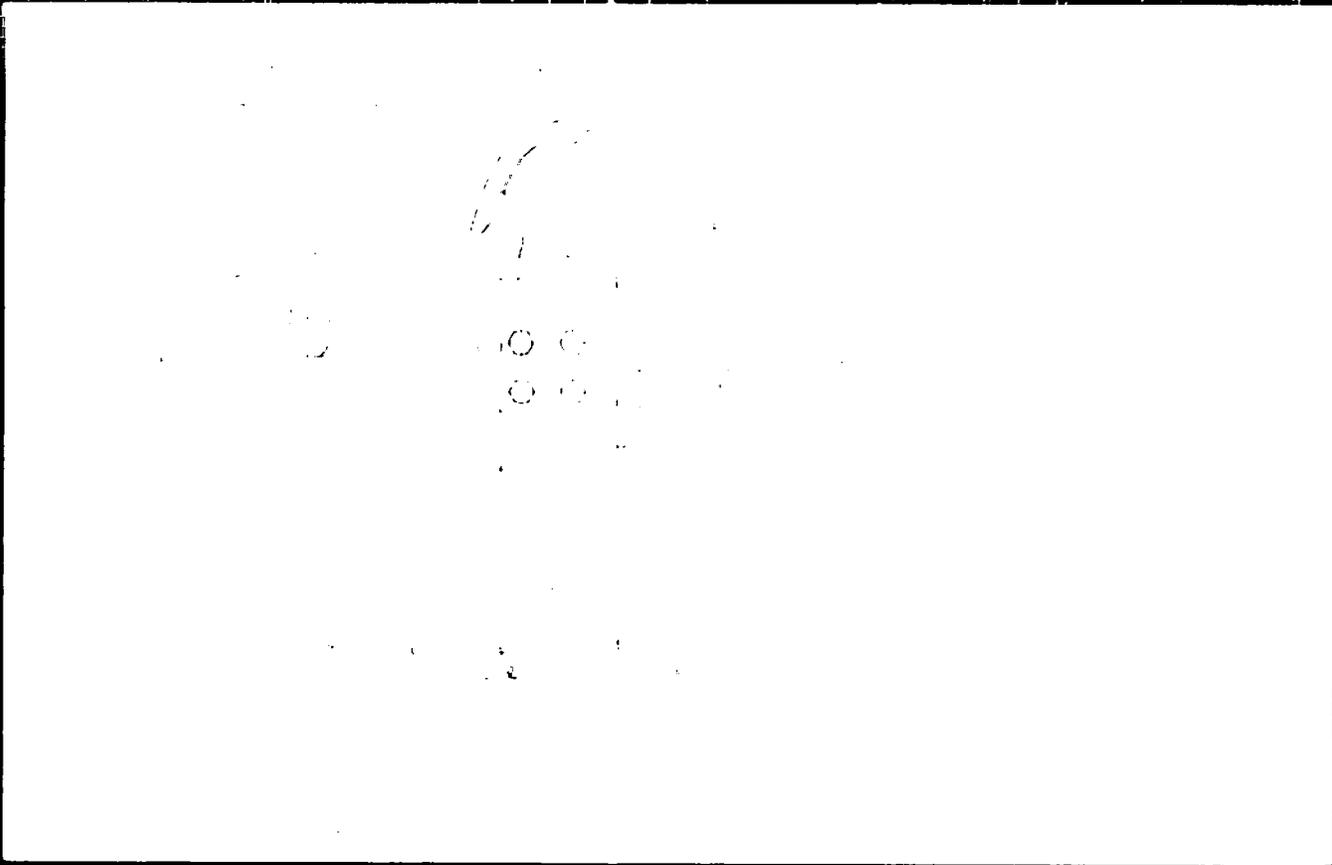
"APPROVED FOR RELEASE: Wednesday, June 21, 2000

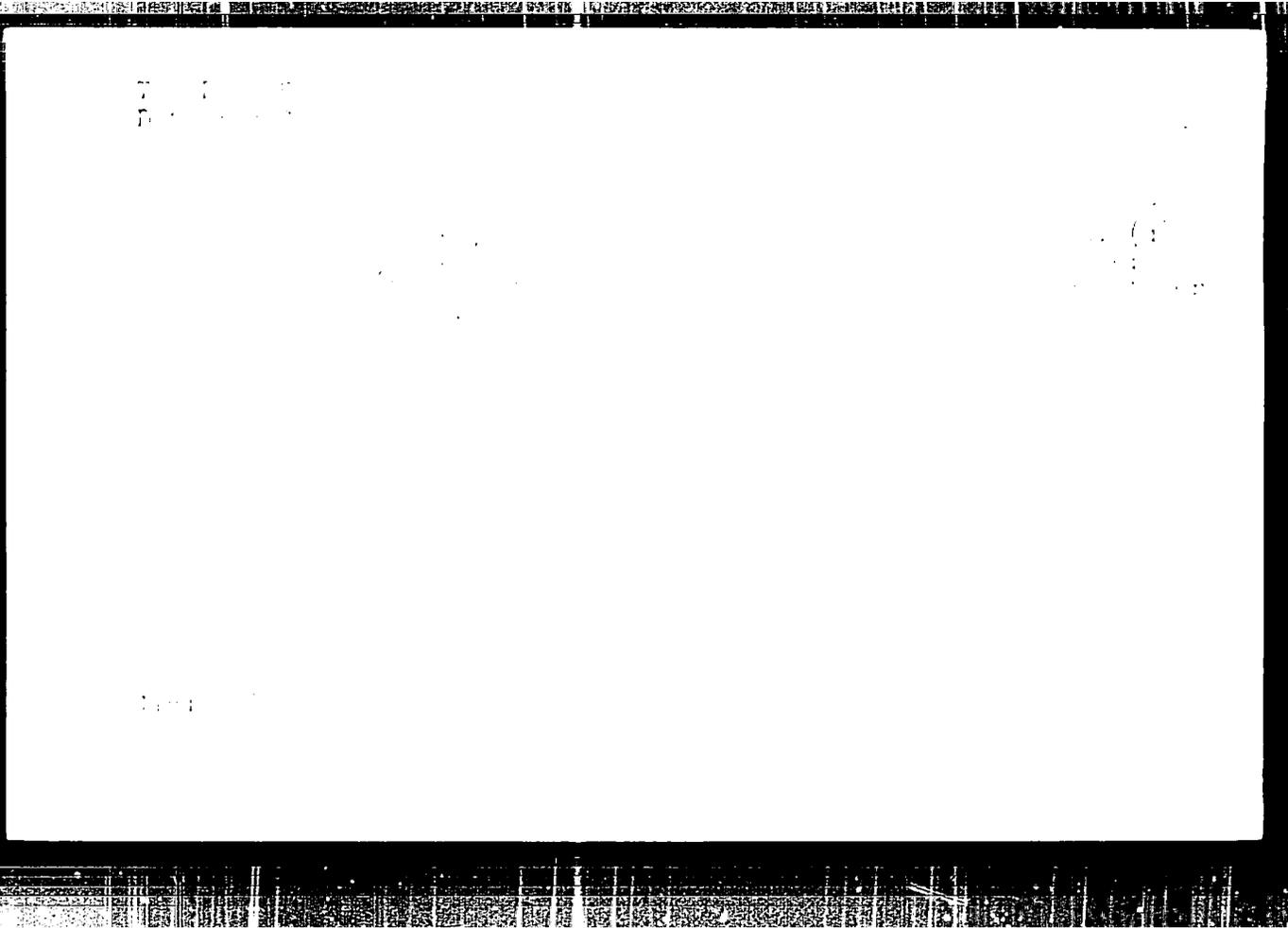
CIA-RDP86-00513R001136



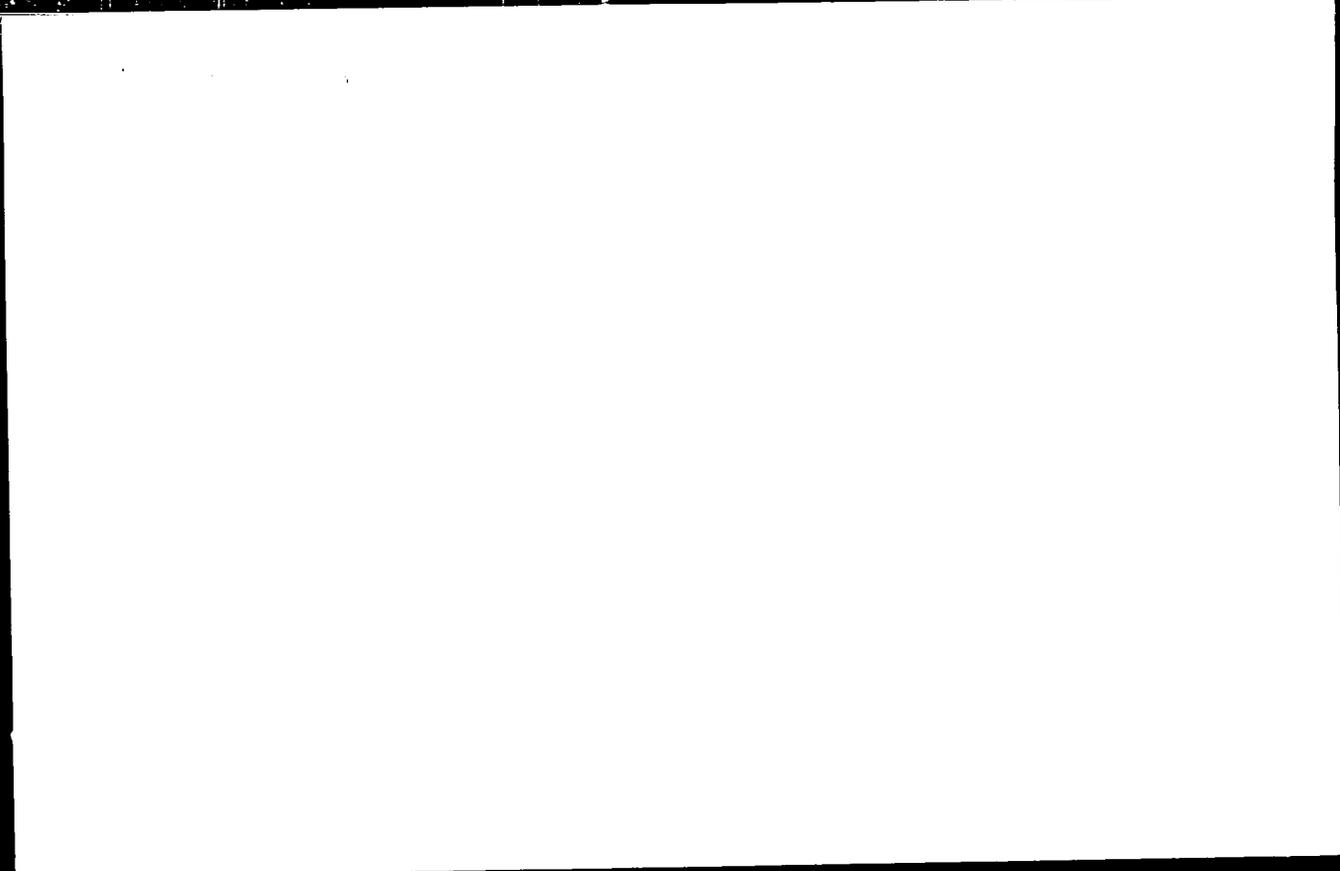
APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001136









NEFEDOV, A.A., inzh.

Cold-rolled electrical steel. Sbor. trui. TSHIICHM no.17:154-162
'60. (MIRA 13:10)

(Steel—Electric properties)
(Rolling (Metalwork))

MINAYEVA, A.P., inzh.; NEFEDOV, A.A., kand.tekhn.nauk; TELUSHKIN, M.V., inzh;
TERMINOSYAN, N.S., inzh.; KURILOV, A.I., inzh.; SKACHKOV, L.M.,
inzh.; POLYAKOV, M.M., inzh; LIPOVETSKIY, I.A., inzh.

Double-groove rolling with guides, of ribbed concrete reinforcing
bars. Stal' 20 no.3:234-243 Mr '60. (MIRA 13:6)

1. Yenakiyevskiy metallurgicheskiy zavod i Dneprodzershinskiy
vecherniy metallurgicheskiy institut.

(Rolling (Metalwork)) (Reinforcing bars)

NEFEDOV, A.A., inzh.; BORZOVA, P.I., inzh.

Properties of cold rolled low-texturized electric engineering steel.
Elektrichestvo no.2:85-87 P '61. (MIRA 14:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
(Electric engineering—Materials)
(Steel)

BELYAKOV, A.I., inzh.; BORZOVA, P.I., inzh.; NEFEDOV, A.A., inzh.;
SIMAKOVA, M.S., inzh.

Properties of low alloyed steel for engineering
steel. Elektrichesk. No. 8. 3 Aug '51. (IRA 14-10)
(Steel)
(Electric engineering—Materials)

MEFEDOV, A.A.; BELYAKOV, A.I.; YAROSHENKO, Yu.M.; DUKHNOVA, Z.I.

High-alloy, cold rolled, electrical steel with low anisotropy.
Stal' 22 no.4:349-351 Ap '62. (MIRA 15:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii i Novosibirskiy metallurgicheskiy zavod.
(Sheet steel) (Anisotropy)

NEFEDOV, Anatoliy Aleksandrovich; GETMANETS, Veniamin Vasil'yevich;
MEZBORODOV, T.I., red.; LEVIT, Ye.I., red. 1st-vn; KARASEV, A.I.,
tekh. red.

[Production of wire rod] Proizvodstvo katanki. Moskva,
Metallurgisdat, 1963. 251 p. (MIRA 16:6)
(Rolling (Metalwork))
(Wire industry—Equipment and supplies)

NEFEDOV, A.A., insh.; BELYAKOV, A.I., insh.; YAROSHENKO, Yu.N. insh.;
DUKHNOVA, Z.I., insh.

Cold-rolled 1 mm. thick electrical steel. Elektrichestvo
no.1:75-77 Ja '63. (MIRA 16:2)
(Steel—Electric properties)

NIKOLAYEV, V.A.; CHERNETA, A.P.; NEFEDOV, A.A.

Regularities of advance changing in grooves for the rolling
of angles. *Izv. vys. ucheb. zav.; Chern. met.* 6 no.4:83-87 '63.
(MIKA 16:5)

1.. Dneprodzerzhinskii stal'nyy i chugunnyy zavod-vtuz.
(Rolling (Metalwork))

NEFEDOV, A.A.; POSTOL'NIK, Yu.S.

Calculating for strength of rods with an annular recess. Izv.
vys. ucheb. zav.; Chern. met. o no.12:118-125 '63.
(MIRA 17:1)
Dneprodzerzhinsky metalurgical plant zavod-vtuz.

NEFEDOV, A.A., kand.tekhn.nauk; CHERNETA, A.P., insh.; DZIGVASHVILI, G.A.,
insh.; ZASLAVSKIY, B.M., insh.; KURDIANI, G.P., insh.

Internal ~~Notes~~ lectures in low-carbon steel pipe billets. Stal' 23
no.5:441-442 My '63. (MIRA 16:5)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtus i Zakavkazskiy
metallurgicheskiy zavod.
(Rolling (Metalwork)) (Steel ingots--Defects)

NEFEDOV, A.A., inzh.; BELYAKOV, A.I., inzh.; YAROSHENKO, Yu.N., inzh.;
DUKHNOVA, Z.I., inzh.

Cold-rolled 0.35 mm thick generator steel. Elektrichestvo no.8:
70-72 Ag '63. (MIRA 16:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii (for Nefedov). 2. Novosibirskiy metallurgicheskiy
zavod (for all except Nefedov).

BELYAKOV, A.I., inzh.; NEFEDOV, A.A., inzh.

Effect of residual stress trails on the electrical properties of
steel. Elektrichestvo no.3:86-88 Mr '64. (MIRA 17:4)

1. Novosibirskiy metallurgicheskiy zavod (for Belyakov).
2. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Nefedov).

Dr. FELIX V. A.A.

Flexure of the emerging ...
diameter rolls. Izv. vya. ucheb. zapovedn. univ. ...
75, 164.

1. Ispytaniya metallov ...

NEFEDOV, A.A.; BREZHNEV, L.A.; SICHEVOY, A.P.; BYSTRIKOV, O.P.;
MIL'MAN, Ye.A.

Studying the deformation of metal transverse helical rolling.
Stal' 24 no.5:429-432 My '64. (MIRA 17:12)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz 1
Dneprovskiy metallurgicheskiy zavod im. Dzerzhinskogo.

NEFEDOV, A. A.; BOBROV, V. I.; SHAFRAN, I. R.; SEMENOV, A. M.; LINDEN, V. I.;
PODCHENKO, A. I.

Investigation of the degradation of butadiene during the
oxidation of ethyl alcohol. Av. Khim. Prilozh. 8:10-12, 1974.
Abstract in: Zh. Fiz. Khim. 48:10-12, 1974.

CHEKMAREV, Aleksandr Petrovich; LEPEDOV, Anatoliy Aleksandrovich;
NIKOLAYEV, Viktor Aleksandrovich; FILIPPOV, I.N., kand.
tekhn. nauk, otv. red.; VAYNBERG, D.A., red.

[Longitudinal rolling theory] Teoriia prodol'noi prokatki.
Khar'kov, Izd-vo Kharkovskogo univ., 1965. 211 p.
(MIPA 18.8)

BORISENKO, V.G., inzh.; NEFEDOV, A.A., inzh.; ZAYDMAN, I.D., inzh.

Low-carbon steel for magnetic circuits of d.c. machines. Elektrotehnika
36 no.7:39-40 J1 '65. (MIRA 18:7)

NEFEDCV, A. D.

Collective Farms

Veterinary and zootechnical services at large collective farms of the Cherkass District of Kiev Province. Veterinariia 29 no.3:6-13 Mr '52.

9. Monthly List of Russian Accessions. Library of Congress, July 1957. Unclassified.

2

NEFEDOV, A. D.

USSR/Medicine - Veterinary

FD-1281

Card 1/1 : Pub 137-1/20

Author : *Nefedov, A. D.

Title : "Veterinary Science and Zootechny" pavilion of the All-Union Agricultural Exhibition

Periodical : Veterinariya, 8, 3-13, Aug 1954

Abstract : "Veterinary Science and Zootechny" pavilion is a separate exhibit of agricultural animals and farm products. The pavilion occupies five halls which form a semicircle in the central part of the All-Union Agricultural Exhibition. The displays aim to show superiority of the Soviet system over the pre-revolutionary, capitalist agriculture. The primary purpose of the exhibit is to spur the new campaign for rise in farm production which is one of the keystones in the Soviet Government's plan for higher living standard. Illustrations.

Institution : (*Director), "Veterinary Science and Zootechny" Pavilion

Submitted :

MEFEDOV, A.D.

What the "Veterinary and seetchny" pavilion will show at the
All-Union Agricultural Exhibition in 1955. Veterinariya 32 no.4:
12-18 Ap '55. (MLRA 8:5)

1. Direktor pavil'ona "Veterinariya i seetchniyna".
(VETERINARY MEDICINE)

NEREDOV, A.

Achievements of livestock breeders from Vinnitsa. Veterinariia
32 no.6:15-23 Jo '55. (MLRA 8:7)

1. Direktor pavil'ona "Veterinariya i sotskhaiya" Vsesoyuznoy
sel'skokhozyaystvennoy vystavki.
(VINNITSA PROVINCE--STOCK AND STOCKBREEDING)

NEFEDOV, A .

Veterinary medicine at the Exhibit of Achievements of the
Economy of the U.S.S.R. Veterinariia 36 no.7:10-13 J1 '59.
(MIRA 12:10)

1. Glavnyy metodist po veterinarii otдела zhivotnovodstva
Vystavki dostizheniy narodnogo khozyaystva Moskva, SSSR.
(Veterinary medicine--Exhibitions)

NEPUDU, A.A.

forward flow and the critical cross section angle during rolling
in variable cross section rolls. Izv. vys. uchen. zav. Chern.
met. No. 1:1979. 144. (MIRA 1711)

.. Dneprodzerzhinskii metallurgicheskii zavod-vtuz.

NEFEDOV, A.D.

Stockbreeding at the Exhibition of Achievements of the
National Economy of the U.S.S.R. in 1964. Inform. biul.
VDNKH no.2:1-2 P '64. (MIRA 17:8)

1. Glavnyy metodist ob'yedinsennykh pavil'onov "Zhivotnovodstvo"
na Vystavke dostizheniy narodnogo khozyaystva.

MEVEDOV, A.F.; GOOLEVA, A.I.

Intestinal obstruction following resection of the stomach.
Khirurgia no.7:85 J1 '55. (MLRA 8:12)

1. Is gorodskoy bol'nitsy g. Chernyakhovska Kalinigradskoy
oblasti.

(INTESTINAL--OBSTRUCTION) (STOMACH--SURGERY)

NEPVEDOV, A.P.

Surgical technic in ruptures of the spleen. *Khirurgiya* 35
no.12:95-96 D '59. (MIRA 13:6)

1. Is Chernyakhovskoy gorodskoy bol'nitsy (Kaliningradskaya
oblast').

(SPLEEN wds. & inj.)

RABUKHIN, A.Ye.; GOMBERG, V.P.; DOBROKHOTOVA, M.E.; MOROZOVA, L.N.;
NEPEDOV, A.F. (Moskva)

Effectiveness of prolonged drug therapy for patients with fresh
forms of pulmonary tuberculosis. Klin.med. no.12:28-33 '61.
(MIRA 15:9)

(TUBERCULOSIS)

И. П. ДОВ А. П.

И. П. ДОВ А. П. - Тезисы

№ 1/1 **Фев. 128 - 24/26**

Издатель :

Наименование : **Abstract of theses**

Периодическое издание : **Вест. маш. 2, 108-109, Feb 1954**

Аннотация : **The following abstracts of theses are presented: Anson, P. I. - Experimental investigation of the strength of cylinder flange joints for high-pressure turbines; Sharin, Yu. S. - The investigation of certain economical processes in cutting metals at various speeds and feeds; Kotikova, E. T. - The effect of cleaning with a blast of metal-shot on the strength of machine components; Lompe, V. E. - The working of holes with an electric spark method; and Mafayev, A. F. - The investigation of the influence of microfinished surfaces on the wear of cylinders of internal combustion engines.**

Институт :

Submitted :

Nefedov A F

AUTHOR: Nefedov, A. F.

123 - 1 - 93

TITLE:

Mutual Influence of Geometrical Parameters of Surface on Its Wear and the Problem of Efficient Technology in Receiving the Most-favorable Micro-profile of Surface in Certain Conditions of Friction (Vzaimnoye vliyaniye geometricheskikh parametrov poverkhnosti na yee iznos is vopro o ratsional'noy tekhnologii polucheniya optimal'nogo mikroprofilya poverkhnosti pri nekotorykh usloviyakh treniya).

PERIODICAL: Nauch. zap. L'vovsk. politekhn. in-ta, 1955, 60-74. (USSR)

Card 1/4

123 - 1 - 93

ABSTRACT:

The influence of technology of machining on the surface wearability, i.e. on its geometrical properties, is discussed. A special equipment for obtaining intermittently-smooth surfaces is described. As a result of the investigation the following deductions are made: 1) reduction of time in built-in surface treatment has been achieved by increased precision in machining, by accelerated wear-away of surfaces in the initial period of work and by the selection of most favorable micro-unevenness of surface; 2) the presence of macro-deviations in the optimum micro-geometry leads to different conditions of work in the initial and the following period of time; 3) the investigation has shown that the highly-smooth surfaces are not the most efficient in

Card 2 / 4

123 - 1 - 93

comparison with the intermittently-smooth surfaces because of the absence of space for accumulation of lubricating reserves; 4) the making of the intermittently-smooth surfaces by the existing method is not efficient; 5) In the production of intermittently-smooth surfaces it has been proven experimentally that it is advisable to perform a highly finished abrasive work on a finely-bored surface with the allowance of 0.5 to 0.75 to the height of the micro-unevenness left after boring. For the surface which has been bored according to 7 - 8 precision class the allowance for abrasive work is 5 to 6 mk (micron) to the diameter; 6) the indicated method of obtaining the intermittently-smooth surfaces is simple, it safeguards a high precision and accuracy of form, and it eliminates the increased wear in the initial period of work. Seven pictures are given and ten items of bibliography. P.OP.

Card 3/4

123 - 1 - 93

Ref.Zh., Mashinostroyeniye, Nr. 1, 1957, Item 93.

ASSOCIATION: Polytechnical Institute in L'vov (L'vovsk.
politekhn. in-t)

PRESENTED BY:

SUBMITTED:

AVAILABLE:

Card 4/4

NEPUDOV, A.F.

Optimum micro structure of cylinder faces. Avt. i trakt. prom.
no.7:31-33 J1 '56. (NLRA 9:10)

1. L'vovskiy politekhnicheskiy institut.
(Cylinders)